

```
#include <stdio.h>
#include <stdlib.h>
```

```
struct node
{
    int dist[15];
    int from[15];
};
```

```
void main()
{
    int a[15][15], n=0, i, j, k, count;
    struct node s[10];
    printf("Enter no. of nodes");
    scanf("%d", &n);
    printf("Matrix:");
    for(i=1; i<n; i++)
    {
        for(j=1; j<n; j++)
        {
            scanf("%d", &a[i][j]);
            s[i].dist[j] = a[i][j];
            s[i].from[j] = j;
        }
    }
}
```



```
do  
{
```

```
    count = 0;  
    for (k=1; k<=n; k++)  
    {  
        for (i=1; i<=n; i++)
```

```
        {  
            for (j=1; j<=n; j++)  
            {  
                if (S[i].dist[j] > a[i][k]  
                    + S[k].dist[j])  
                {  
                    S[i].dist[j] = a[i][k]  
                        + S[k].dist[j];  
                    S[i].from[j] = k;  
                    count++;  
                }  
            }  
        }  
    }  
}
```

```
while (count != 0)  
{  
    for (i=1; i<=n; i++)  
    {  
        for (j=1; j<=n; j++)  
            printf("Src: %d, Dest: %d, i, j);  
    }  
}
```

```
}
```